

August 11, 2017

Public Health Preparedness and Situational Awareness Report: #2017:31 Reporting for the week ending 08/05/17 (MMWR Week #31)

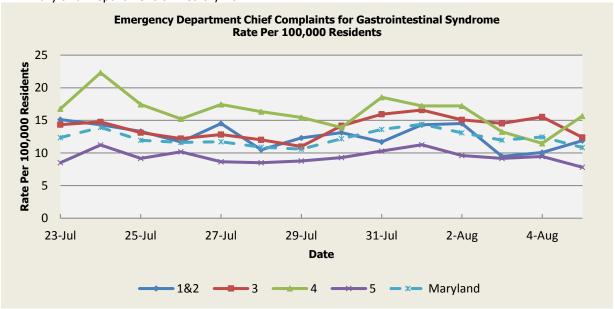
CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

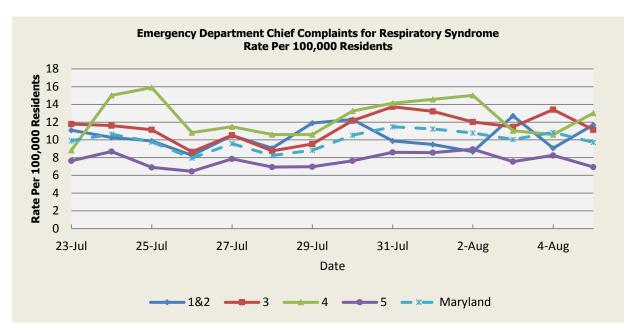
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based **Epidemics**): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There was one (1) Gastrointestinal Syndrome outbreak reported this week: one (1) outbreak of Gastroenteritis associated with a Restaurant (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	12.46 14.58 14.89 9.94 12.65								
Median Rate*	12.91 14.80 15.02 10.22 12.95								

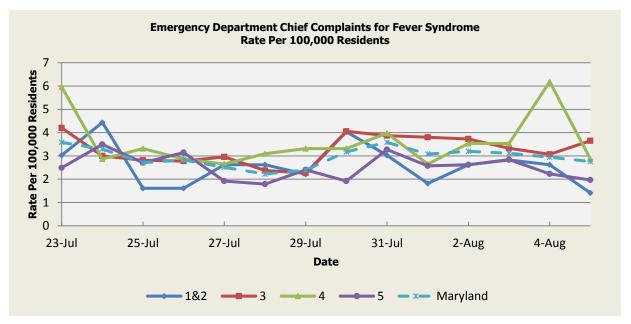
^{*} Per 100,000 Residents



There were no Respiratory Syndrome outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryland							
Mean Rate*	11.63 13.94 13.84 9.61 12.08							
Median Rate*	11.70 13.88 13.91 9.65 12.05							

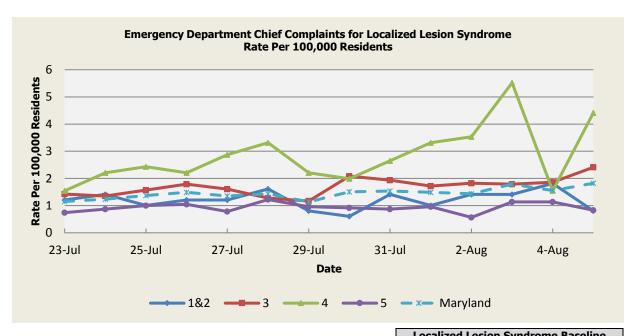
* Per 100,000 Residents



There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	2.92 3.74 3.84 2.97 3.38								
Median Rate* 2.82 3.76 3.75 2.97 3.40									

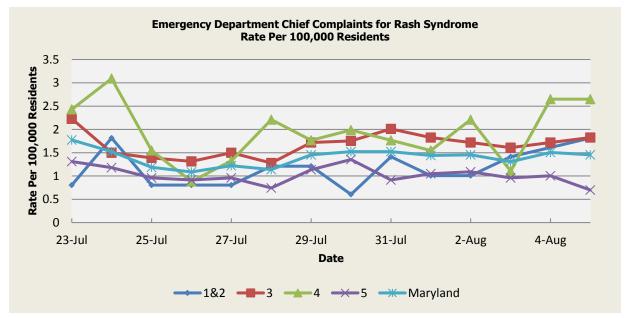
Per 100,000 Residents



There were no Localized Lesion Syndrome outbreaks reported this week.

		Data January 1, 2010 - Present									
Hea	Ith Region	1&2	1&2 3 4 5 Maryland								
Me	an Rate*	1.01	1 1.82 1.95 0.93 1.42								
Med	dian Rate*	1.01 1.83 1.99 0.92 1.42									

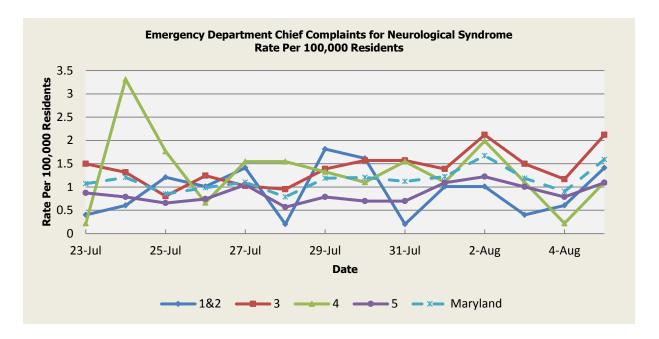
^{*} Per 100,000 Residents



There were no Rash Syndrome outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	1.20 1.69 1.71 0.99 1.38								
Median Rate*	1.21	1.21 1.68 1.77 1.00 1.39							

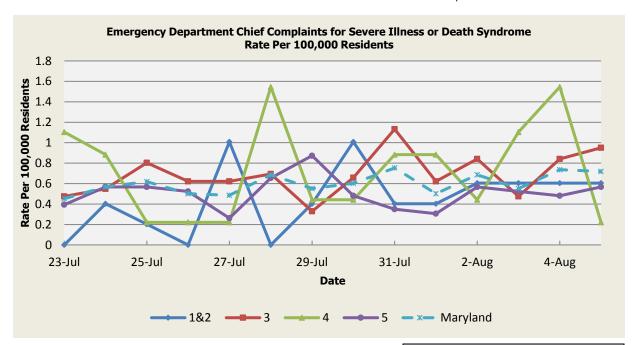
^{*} Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2	1&2 3 4 5 Maryland								
Mean Rate*	0.63 0.77 0.66 0.49 0.64									
Median Rate*	0.60	0.60 0.69 0.66 0.48 0.59								

^{*} Per 100,000 Residents

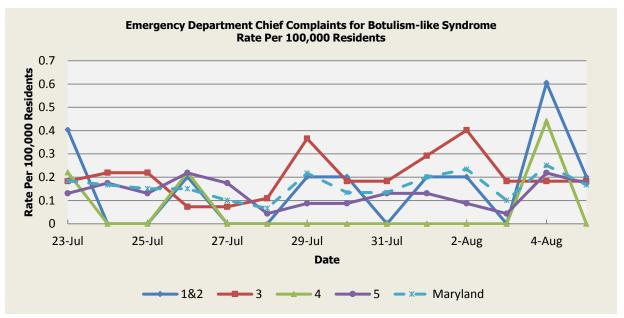


There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	0.62 0.89 0.78 0.44 0.69								
Median Rate*	0.60 0.91 0.66 0.44 0.70								
-	* Day	100 000	Danidant	_					

^{*} Per 100,000 Residents

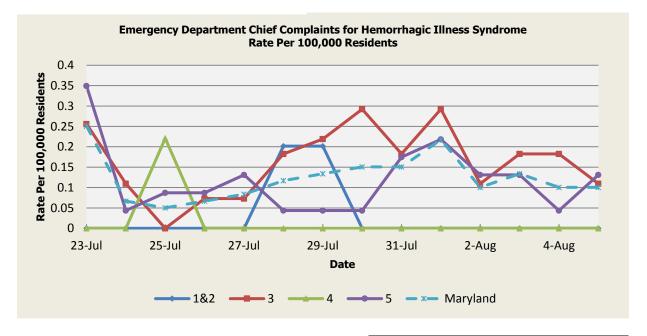
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 07/23 (Regions 1&2,3,4,5), 07/24 (Regions 3,5), 07/25 (Regions 3,5), 07/26 (Regions 1&2,4,5), 07/27 (Region 5), 07/29 (Regions 1&2,3), 07/30 (Regions 1&2,3), 07/31 (Regions 3,5), 08/01 (Regions 1&2,3,5), 08/02 (Regions 1&2,3), 08/03 (Region 3), 08/04 (Regions 1&2,3,4,5), 08/05 (Regions 1&2,3,5), . These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present									
Health Region	1&2	1&2 3 4 5 Maryland								
Mean Rate*	0.06	0.06 0.09 0.04 0.06 0.07								
Median Rate*	0.00	0.00 0.07 0.00 0.04 0.05								

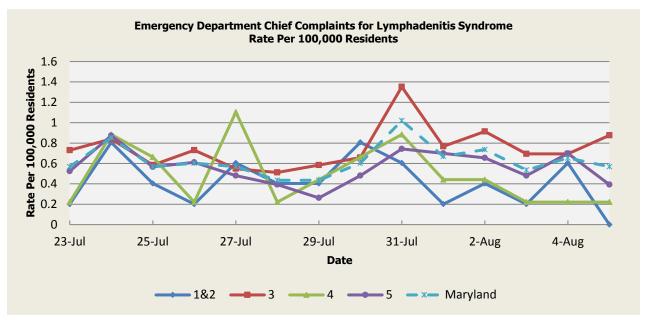
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 07/23 (Regions 3,5), 07/25 (Region 4), 07/28 (Regions 1&2), 07/29 (Regions 1&2), 07/30 (Region 3), 08/01 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present								
Health Region	182 3 4 5 Marylai								
Mean Rate*	0.03	0.12	0.03	0.09	0.10				
Median Rate*	0.00	0.04	0.00	0.04	0.05				

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 07/24 (Regions 1&2,4,5), 07/27 (Regions 1&2), 07/30 (Regions 1&2), 07/31 (Regions 1&2,3,4,5), 08/01 (Region 5), 08/04 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	0.30 0.51 0.34 0.31 0.40								
Median Rate*	0.20 0.40 0.22 0.26 0.33								

^{*} Per 100,000 Residents

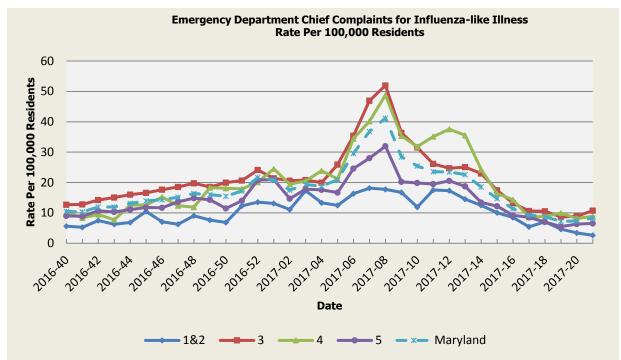
MARYLAND REPORTABLE DISEASE SURVEILLANCE

	Counts of Reported Cases‡						
Condition		August		Cumula	tive (Year to	Date)**	
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*	
Aseptic meningitis	5	6	7	193	249.2	232	
Meningococcal disease	0	0	0	4	3.2	3	
Measles	0	0.2	0	4	4	3	
Mumps	0	0.6	1	21	35.4	14	
Rubella	0	0.2	0	1	4	3	
Pertussis	0	8	8	140	190.6	194	
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*	
Salmonellosis	12	30.8	30	459	540.4	549	
Shigellosis	2	4.8	5	153	124.4	150	
Campylobacteriosis	6	18.2	18	493	474.6	482	
Shiga toxin-producing Escherichia coli (STEC)	3	4.4	4	104	92.8	85	
Listeriosis	0	0.8	0	15	9.8	10	
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*	
West Nile Fever	0	0.6	1	1	4.4	4	
Lyme Disease	49	68.6	65	2193	1971.2	1909	
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*	
Chikungunya	0	0	0	0	3	0	
Dengue Fever	0	0.8	0	9	17.2	10	
Zika Virus***	0	0.4	0	1	9.2	6	
Other	2017	Mean*	Median*	2017	Mean*	Median*	
Legionellosis	4	2.2	2	128	103.8	98	

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. ‡ Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of August 11, 2017, the total Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection for 2017 is 46.

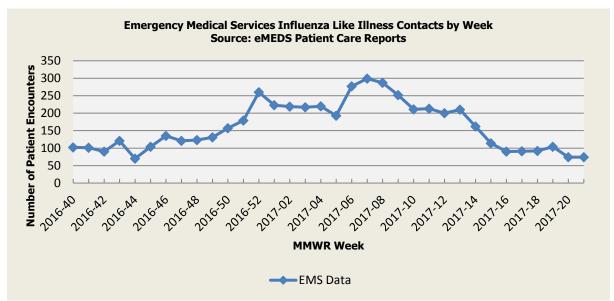
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).

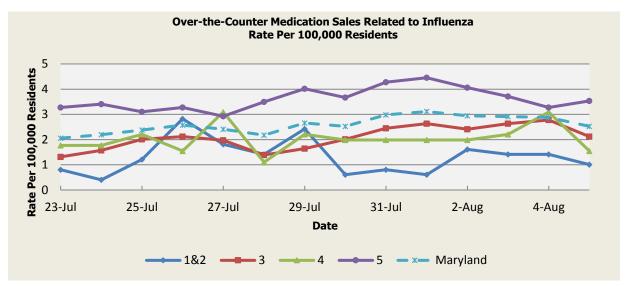


	Influenza-like Illness Baseline Data Week 1 2010 - Present								
Health Region	1&2 3 4 5 Maryland								
Mean Rate*	167.70 223.96 205.49 194.23 206.50								
Median Rate*	7.66 9.63 9.05 8.51 9.00								

* Per 100,000 Residents



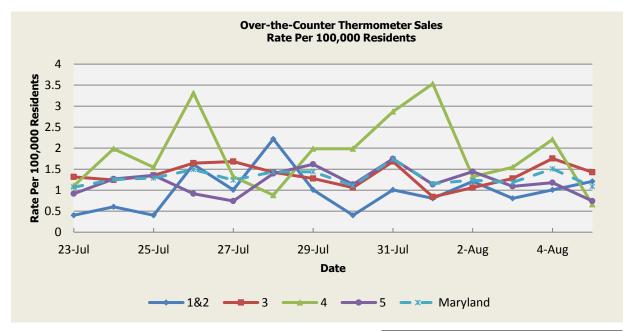
Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.



There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

	OTC Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.64	4.73	2.63	8.15	5.79
Median Rate*	3.23	4.38	2.43	8.03	5.52

^{*} Per 100,000 Residents



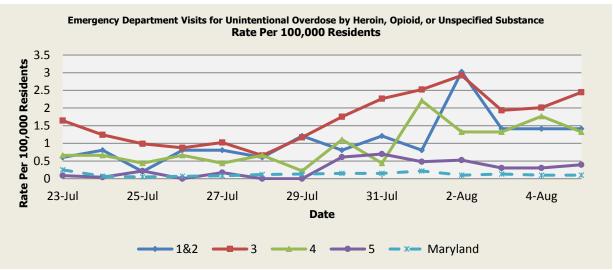
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.25	3.12	2.41	4.17	3.48
Median Rate*	3.02	3.03	2.43	4.06	3.36

^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

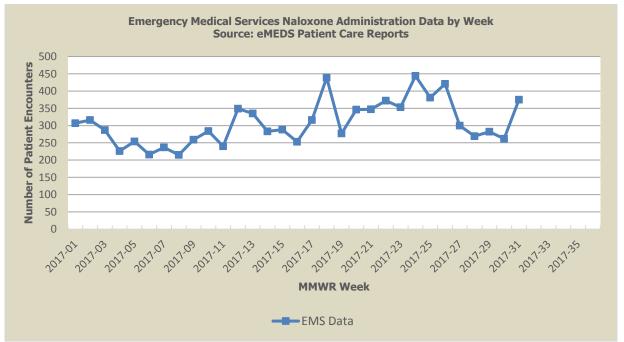
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



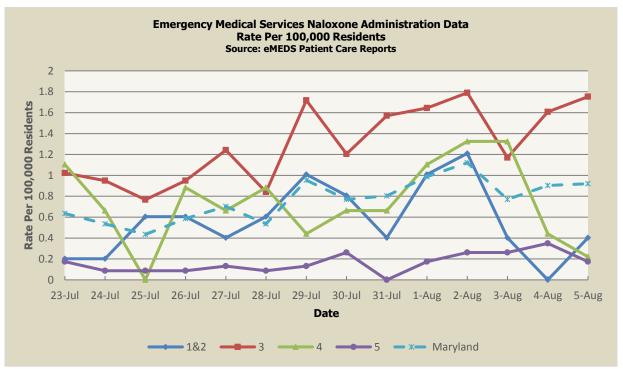
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

	Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.36	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

	EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.40	0.36	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

^{*} Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of <u>June 15, 2017</u>, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA:

HPAI H5N8 (ENGLAND), 7 Aug 2017, Highly pathogenic influenza A viruses infections with non-poultry including wild birds. Read More: https://www.promedmail.org/post/5234463

HUMAN AVIAN INFLUENZA:

H7N9 (CHINA), 7 Aug 2017, The Centre for Health Protection (CHP) of the Department of Health is monitoring a notification from the National Health and Family Planning Commission that one additional human case of avian influenza A (H7N9) was recorded from 28 Jul to 3 Aug 2017 in Fujian, and strongly urged the public to maintain strict personal, food and environmental hygiene both locally and during travel. The 58-year-old male patient in Fujian was known to have had exposure to a live poultry farm and had onset on 19 Jul 2017. Read More: https://www.promedmail.org/post/5231257

HPAI H5N8 (SOUTH AFRICA), 8 Aug 2017, RCL Foods has reported an outbreak of avian influenza (AI) in one its 18 sheds on its Viva farm near Mulderdrift, Gauteng - a relatively small breeder facility with approximately 67 000 birds in total. Breeding facilities are not used for meat production and these birds were in any event at the end of their life cycle, so market supply will not be affected. Read More: https://www.promedmail.org/post/5236421

NATIONAL DISEASE REPORTS:

EASTERN EQUINE ENCEPHALITIS (ALABAMA), 6 Aug 2017, EEE, a form of mosquitoborne encephalitis, has been confirmed by laboratory results, according to Dr Bernard H Eichold II, health officer for the Mobile County. The risk of encephalitis spread by mosquitoes is highest from August through the 1st freeze in the fall. Read More: https://www.promedmail.org/post/5230898

SALMONELLOSIS, SEROTYPE KIAMBU (MULTI-STATE), 7 Aug 2017, 64 more ill people were added to this investigation from 15 states. As of 3 Aug 2017, 109 people infected with the outbreak strains of *Salmonella Kiambu* and S. Thompson have been reported from 16 states. Read More: https://www.promedmail.org/post/5233115

ST. LOUIS ENCEPHALITIS VIRUS (CALIFORNIA), 8 Aug 2017, A mosquito carrying a possibly debilitating virus rarely seen in Northern California has been found in the town of Plumas Lake, 30 mi [approx. 48 km] north of Sacramento, local health officials said on [Mon 7 Aug 2017]. The virus is

spread through bites from infected mosquitoes, and symptoms include fever, headache, nausea and vomiting. Read More: https://www.promedmail.org/post/5236278

LA CROSSE ENCEPHALITIS (TENNESSEE), 8 Aug 2017, East Tennessee Children's Hospital is reporting a spike in children diagnosed with a mosquito-borne virus that, left undetected, can cause brain damage or, rarely, death. Dr. Lori Patterson, infectious disease physician at the hospital, said doctors there have seen 7 children in 4 weeks with La Crosse encephalitis. Typically, Tennessee sees a dozen cases of the virus in a year. Read More: https://www.promedmail.org/post/5237130

HEPATITIS A (CALIFORNIA) 8 Aug 2017, Since early 2017, the Public Health Services Division, in the County of San Diego Health and Human Services Agency, has been investigating a local Hepatitis A outbreak. The outbreak investigation is ongoing. It has been challenging because of the long incubation period of the disease (15 to 50 days) and the difficulty experienced to contact many individuals sickened with the illness who are homeless and/or illicit drug users. To date, no common source of food, beverage, or other cause has been identified; as a result, the source of the outbreak remains undetermined. Read More: https://www.promedmail.org/post/5238557

INTERNATIONAL DISEASE REPORTS:

HANTAVIRUS (CHILE), 5 Aug 2017, A new suspected case of hantavirus in Purranque was taken to the Temuco hospital. The affected individual is a 24-year-old agricultural worker who had contracted the virus in Purranque. After testing positive in the rapid test, the man was immediately taken to Temuco, where he is currently. Read More: https://www.promedmail.org/post/5229066

JAPANESE ENCEPHALITIS (INDIA), 5 Aug 2017, Ouguri in Assam's Jorhat district, which is part of the Bhogamukh administrative block, has been at the centre of an acute encephalitis syndrome [AES] outbreak. At least 13 cases have been detected in the last 2 months in the block. In Ouguri revenue circle, 11 villages with a population of slightly more than 10 000, has accounted for almost all of them. Acute encephalitis syndrome is a condition of brain inflammation caused by both bacterial and viral infections Read More: https://www.promedmail.org/post/5229244

HENDRA VIRUS (AUSTRALIA), 5 Aug 2017, The New South Wales (NSW), Australia, Department of Primary Industries (DPI) is urging owners to remain vigilant, following confirmation of Hendra virus infection in an unvaccinated horse near Murwillumbah. Christine Middlemiss, the NSW chief veterinary officer, said Local Land Services has placed the property near Murwillumbah under movement restrictions. This is the 2nd confirmed case of Hendra in NSW this year [2017], following a Hendra virus infection in an unvaccinated horse near Lismore last month. Read More: https://www.promedmail.org/post/5229510

LASSA FEVER (NIGERIA), 5 Aug 2017, Six (6) suspected cases of Lassa fever with 3 laboratory confirmed and one death were reported from 5 local government areas in week 28, 2017 compared with one case from Ibadan North LGA (Oyo State) at the same period in 2016. Read More: https://www.promedmail.org/post/5229598

CRIMEAN-CONGO HEM. FEVER (PAKISTAN), 6 Aug 2017, The 1st Congo virus case was reported at the Allied Hospital here. TH, a resident of Chanchal Singhwala, was shifted to the hospital after he felt severe intestinal pain and fever. After his thorough examination, the doctors diagnosed his disease and declared him a Congo virus patient. After detection of Congo virus in the patient, the Health Department has adopted all precautionary measures and directed heads of all the government hospitals in the district to keep a vigilant eye in their respective areas. Read More: https://www.promedmail.org/post/5229643

HANTAVIRUS (ALBANIA), 6 Aug 2017, In Albania, there are two (2) imported cases of hemorrhagic fever with renal syndrome (HFRS), one imported from the north of Greece and another from Macedonia in a village near the border with Albania. The patient from Macedonia is 25 years old. He was presented to the emergency room on 31 Jul 2017. Right now, he is in good condition and will survive. His symptoms included fever, nausea and vomiting, abdominal pain, and lower back pain. The other

patient from Greece had been treated, and is recovering in the comfort of his home. Read more: https://www.promedmail.org/post/5230949

MERS-COV (SAUDI ARABIA), 6 Aug 2017, There have been a total of 1683 laboratory-confirmed cases of MERS-CoV infection, including 683 deaths [reported case fatality rate 40.6 per cent, 988 recoveries, and 12 currently active cases/infections. Read More: https://www.promedmail.org/post/5232071

BOTULISM (PORTUGAL), 7 August 2017, Public health authorities have reported and confirmed 4 cases of food-borne botulism related to the consumption of smoked ham. The small outbreak took place after the consumption of homemade smoked ham in Macedo de Cavaleiros, a town in the [Bragança district in the] northeastern region of Portugal, after a meal on 19 Jul 2017. Six persons were exposed and 4 reported symptoms consistent with foodborne botulism. Read More: https://www.promedmail.org/post/5233020

JAPANESE ENCEPHALITIS (INDIA), 8 Aug 2017, CM Yogi Adityanath's Lok Sabha constituency of Gorakhpur has witnessed at least 114 deaths due to acute encephalitis syndrome (AES) this year 2017. Sixteen (16) new cases of AES and 3 deaths were reported from Baba Raghav Das (BRD) Medical College, the largest in the district. However, the hospital and district health officials are claiming that the situation is much better than in the previous years. Read More: https://www.promedmail.org/post/5234297

TYPHOID FEVER (INDIA), 8 Aug 2017, At least 24 typhoid cases have been reported from Boddapadu village of Krishna district in Vijayawada metropolis (Andhra Pradesh), according to a local media report. Health officials suspect that water contamination in the village could be the reason for the disease. Read More: https://www.promedmail.org/post/5235812

CHIKUNGUNYA (PAKISTAN), 9 Aug 2017, A special team of doctors rushed to Tharparkar (Sindh) on (Mon 7 Aug 2017) amid reports of an outbreak of chikungunya in the arid region although Sindh health authorities sought to downplay the threat from the viral disease. A total of 78 positive cases of chikungunya had been reported in Tharparkar so far since January to August 2017. Read More: https://www.promedmail.org/post/5235254

TYPHOID FEVER (GUATEMALA), 9 Aug 2017, So far, 60 positive cases and 2 deaths of typhoid fever have been confirmed in Peten department, officials say. The Health Minister, Lucrecia Hernandez, confirmed that the outbreak began in the municipality of Dolores, Peten department. The 1st documented case occurred on 9 Jul 2017 and to date 60 cases have been reported. Read More: https://www.promedmail.org/post/5238178

ANTHRAX (RUSSIA), 9 Aug 2017, The authorities responded with resolve when a serious outbreak of anthrax shook the far northern Yamal-Nenets Autonomous Okrug [province] in summer 2016. A mass evacuation of reindeer herders, including children, quickly started from the exposed areas and the country's Ministry of Defence launched a special emergency task force equipped with 30 tons of biologically active agents aimed at decontamination of infected areas. Read More: https://www.promedmail.org/post/5238515

EBOLA-LIKE ILLNESS (UGANDA), 9 Aug 2017, Samples collected yesterday (8 Aug 2017) from the 3 surviving suspects in the Luwero VHF (viral hemorrhagic fever) alert have tested negative by PCR for all Ebola, Marburg, CCHF [Crimean-Congo Hemorrhagic Fever], RVF [Rift Valley Fever], and Sosuga viruses at UVRI (Uganda Virus Research Institute). The district is already aware of these preliminary findings. Testing is underway for the one sample collected from the deceased case. Read More: https://www.promedmail.org/post/5239672

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

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Temporary Epidemiology Field Assignee, CDC

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions	
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism	
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A	
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)	
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever	
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia	
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)	
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A	
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox	
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)	
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A	

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Dagions 1 % 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

